CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/W.No.06/KLNR/CSR-07/085e/CEMENT/2016-17 Date: 08.07.2016

TEST REPORT ON CEMENT

* CUSTOMER	:	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
*AGENCY	:	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Bangalore.
*NAME OF THE WORK	:	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
*REFERENCE	:	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
SAMPLE ID	:	Cement
SAMPLE RECEIVED ON	:	06.07.2016
PERIOD OF TESTING	:	06.07.2016 to 08.07.2016

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988(RA-2009)	29.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988(RA-2009)	135 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988(RA-2009)	490 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988(RA-2009)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

AE-06 n/a

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⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

****

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Quality Manager

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T-2377

Job No.: CTCE/BBMP/W.No.06/KLNR/CSR-07/085e/SAND-Gradation/2016-17 : 08.07.2016

TEST REPORT ON DETERMINATION GRADATION OF FINE AGGREGATES

*** Customer** : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

*** Agency** : **Mr. K. Lakshmi Narayana Reddy,**
#96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

*** Name of Work** : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

Technical Reference : IS : 2386 Part 1 - 1963 RA-2007

Sample ID : Fine Aggregates

Sample Received on : 06.07.2016

Date of Testing : 08.07.2016

Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	95.40	90-100	90-100	90-100	95-100
2.36	76.40	60-95	75-100	85-100	95-100
1.18	52.90	30-70	55-90	75-100	90-100
600 Micron	23.90	15-34	35-59	60-79	80-100
300 Micron	9.90	5-20	8-30	12-40	15-50
150 Micron	3.40	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-I specific limits.

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Job No.: CTCE/BBMP/W.No.06/KLNR/CSR-07/085e/AGG/GR/2016-17 : 08.07.2016

TEST REPORT ON DETERMINATION GRADATION OF COARSE AGGREGATES

*** Customer** : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

*** Agency** : **Mr. K. Lakshmi Narayana Reddy,**
#96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

*** Name of Work** : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

Technical Reference : IS : 2386 Part 1 -1963 RA-2007

Sample ID : Coarse Aggregates (40mm)

Sample Received on : 06.07.2016

Date of Testing : 08.07.2016

Total Wt. of Aggregates in gms= **7000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)	
		Graded	Single Sized
80	100	100	-
63	100	-	100
40	98.29	95-100	85-100
20	37.57	30-70	0-20
10	17.57	10-35	0-5
4.75	4.71	0-5	-

* Information is furnished by the Customer/Representative

Remarks : This sample is under Graded specific limits.

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Job No.: CTCE/BBMP/W.No.06/KLNR/STEEL/2016-17 08.07.2016

TEST REPORT ON REINFORCEMENT STEEL

Customer	:	**Asst. Executive Engineer**, Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	:	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Bangalore.
Name of the Work	:	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	:	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Date of Test	:	08.07.216
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	10	0.62	513	556	13.25	O.K	O.K

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T-2377

Job No.: CTCE/BBMP/W.No.06/KLNR/CSR-07/085e/CUBE/2016-17 12.08.2016

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*** Customer** : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

*** Agency** : **Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

*** Name of the work** : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

*** Reference** : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

*** Sample ID** : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*** Grade of Concrete** : M_{15}

Compressive Strength as on : 28th day

Sample Received on : 12.08.2016

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	15.07.2016	12.08.2016	8.128	369.6	16.43
2	15.07.2016	12.08.2016	8.235	372.3	16.55
3	15.07.2016	12.08.2016	8.397	389.9	17.33

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Job No.: CTCE/BBMP/W.No.06/KLNR/CSR-07/085e/CUBE/2016-17 16.08.2016

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

*** Customer** : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

*** Agency** : **Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

*** Name of the work** : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

*** Reference** : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

*** Sample ID** : Drain Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

*** Grade of Concrete** : M_{20}

Compressive Strength as on : 28th day

Sample Received on : 16.08.2016

Sl.No.	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	19.07.2016	16.08.2016	8.278	478.3	21.26
2	19.07.2016	16.08.2016	8.335	499.3	22.19
3	19.07.2016	16.08.2016	8.425	512.3	22.77

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Job No.: CTCE/BBMP/W.No.06/KLNR/WMM/Gradation/2016-17 15.07.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Customer : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Mr. K. Lakshmi Narayana Reddy,**
#96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

Name of Work : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

Date of Testing : 15.07.2016

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **7765**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	155	155	2.0	98.0	95-100
22.4	2450	2605	33.5	66.5	60-80
11.2	1210	3815	49.1	50.9	40-60
4.75	1080	4895	63.0	37.0	25-40
2.36	990	5885	75.8	24.2	15-30
0.600	850	6735	86.7	13.3	8-22
0.075	680	7415	95.5	4.5	0-8

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AE-96 n/a only

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Job No.: CTCE/BBMP/W.No.06/KLNR/WMM/Gradation/2016-17 22.07.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Customer : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Mr. K. Lakshmi Narayana Reddy,**
#96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

Name of Work : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

Date of Testing : 22.07.2016

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **7670**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	160	160	2.1	97.9	95-100
22.4	2515	2675	34.9	65.1	60-80
11:2	1250	3925	51.2	48.8	40-60
4.75	1090	5015	65.4	34.6	25-40
2.36	995	6010	78.4	21.6	15-30
0.600	680	6690	87.2	12.8	8-22
0.075	600	7290	95.0	5.0	0-8

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Job No.: CTCE/BBMP/W.No.06/KLNR/WMM/Gradation/2016-17 27.07.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Customer : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Mr. K. Lakshmi Narayana Reddy,**
#96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

Name of Work : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

Date of Testing : 27.07.2016

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **7860**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	150	150	1.9	98.1	95-100
22.4	2515	2665	33.9	66.1	60-80
11.2	1300	3965	50.4	49.6	40-60
4.75	1095	5060	64.4	35.6	25-40
2.36	950	6010	76.5	23.5	15-30
0.600	900	6910	87.9	12.1	8-22
0.075	650	7560	96.2	3.8	0-8

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HE-06 n/a

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Job No.: CTCE/BBMP/W.No.06/KLNR/WMM/Gradation/2016-17 30.07.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Customer : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Mr. K. Lakshmi Narayana Reddy,**
#96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.

Name of Work : Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016

Date of Testing : 30.07.2016

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **8230**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	185	185	2.2	97.8	95-100
22.4	2550	2735	33.2	66.8	60-80
11.2	1350	4085	49.6	50.4	40-60
4.75	1050	5135	62.4	37.6	25-40
2.36	990	6125	74.4	25.6	15-30
0.600	965	7090	86.1	13.9	8-22
0.075	750	7840	95.3	4.7	0-8

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30-7-2016

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Job No.: CTCE/BBMP/W.No.06/KLNR/WMM/AIV/2016-17 15.07.2016

Aggregate Impact Value

IS: 2386 Part IV

Customer	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
Name of the Work	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	15.07.2016

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	380	382	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	79	80	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	302	
4	Aggregate Impact value = percent fines	20.79	20.94	
	100* (W_2/W_1)%			20.87

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

Note:

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AE-06 n/a

30-7-2016

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Job No.: CTCE/BBMP/W.No.06/KLNR/WMM/S-T/2016-17 15.07.2016

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Customer	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
Name of Work	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	15.07.2016

Result : Flakiness Index = **12.85%**

Elongation Index = **13.56%**

Result : Combined Flakiness & Elongation index 26.41%

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

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30.7.2016

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Job No.: CTCE/BBMP/W.No.06/KLNR/SDBC/AIV/2016-17 12.08.2016

Aggregate Impact Value

IS: 2386 Part IV

Customer	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
Name of the Work	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Source / Location	Hot Mix Plant, Bangalore
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	12.08.2016

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	386	387	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	86	87	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines 100* (W_2/W_1)%	22.28	22.48	22.38

Comments:

→ Maximum allowable Aggregate Impact value for Semi Dense Bituminous Concrete is 27%

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AE:06 n/a

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Job No.: CTCE/BBMP/W.No.06/KLNR/SDBC/Shape_T/2016-17 12.08.2016

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Customer	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
Name of Work	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Technical Reference	IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	12.08.2016

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Result : Flakiness Index = **11.95%**

Elongation Index = **13.65%**

Result : Combined Flakiness & Elongation index **25.60%**

Comments:

→ Maximum allowable Flakiness & Elongation Index for Semi Dense Bituminous Concrete is 30%

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Job No.: CTCE/BBMP/W.No.06/KLNR/SDBC/Stripping/2016-17 12.08.2016

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Customer	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
Name of the work	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	12.08.2016

Type of binder : 80/100
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.1	3.20	96.80
2	3.2		
3	3.3		

Comments:

→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/W.No.06/KLNR/SDBC/Sp_Wa/2016-17 12.08.2016

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Customer	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
Agency	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
Name of the Work	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
Reference	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
Type of Mix	Semi Dense Bituminous Concrete
Source / Location	Hotmix Plant, Bangalore
Date of Testing	12.08.2016

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2022	2023	2024	
2	Weight of basket suspended in water	W_2 g	750	750	750	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1272	1273	1274	
4	Weight of saturated surface dry aggregate in air	W_3 g	2015	2016	2017	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	743	743	743	
6	Weight of oven dried aggregate	W_4 g	2000	2004	2003	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.692	2.697	2.696	2.695
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.747	2.741	2.748	2.745
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.75%	0.60%	0.70%	0.68%

Comments:

→ Maximum allowable Aggregate Water absorption value for Semi Dense Bituminous Concrete is 2.0%

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Job No.: CTCE/BBMP/W.No.06/KLNR/SDBC/Bitumen/2016-17 12.08.2016

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. K. Lakshmi Narayana Reddy,** #96/2, Doddahullurappa Layout, Vishwanatha Nagenahalli, Banglore.
NAME OF THE WORK	Improvements to Roads and drains at Chanakya Layout in Ward No. 06, Byatarayanapura Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/EE/BTP/WO/58/2016-17 Dated: 23.06.2016
SAMPLE I/D	Roads in Chanakya Layout Ward 06
DATE OF TESTING	12.08.2016

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475.5	473.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	24.5	26.50
7. Bitumen content in %	4.90	5.30
8. Average	**5.10**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	32.29	6.79	6.79	93.21	90-100
4.75	263.5	55.42	62.21	37.79	35-51
2.36	33.15	6.97	69.18	30.82	24-39
1.18	40.25	8.46	77.64	22.36	15-30
0.3	42.12	8.86	86.50	13.50	9-19
0.075	31.22	6.57	93.07	6.93	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	33.36	6.67	6.67	93.33	90-100
4.75	262.3	52.46	59.13	40.87	35-51
2.36	59.25	11.85	70.98	29.02	24-39
1.18	49.12	9.82	80.81	19.19	15-30
0.3	32.25	6.45	87.26	12.74	9-19
0.075	40.22	8.04	95.30	4.70	3-8

AE-06 n/a my

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